become positive before that of the FTA-ABS test.[6 7] The reason for the delayed reactivity of the TPHA test in a small number of cases of primary syphilis is not clear. It is not likely to be a lack of reactivity of the TPHA test to IgM antibody, as in early experimental treponemal orchitis the bulk of the TPHA antibody is found in the 19S fraction.[8]

The advantage of performing the VDRL test in addition to the TPHA test is certainly not manifest in this small series. If the VDRL test were omitted there would be a saving not only of the cost of the test, but the additional investigations during pregnancy and postpartum would have been avoided. Microscopical assessment required in the FTA-ABS test precludes its use for screening large numbers of sera in most routine laboratories.

The abandonment of the VDRL test as a screening test is supported by its failure to detect further cases of syphilis in this series of antenatal sera, provided that the TPHA test is used. Thus the TPHA test might become the sole screening test in antenatal serology as long as syphilis remains an uncommon disease.

We would like to thank Professor N Morris for access to his patients' case notes.

Yours faithfully,

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References

1. Friedmann PJ, Wright DJM. Observations on syphilis in Addis Ababa. 2 Prevalence and natural history. *Br J Vener Dis* 1977;**53**: 276-80.
2. Wilkinson AE. Laboratory diagnosis of venereal diseases. *Monograph Series No 1.* London: Public Health Laboratory Service, 1972:1-8.
3. Hare MJ. Serological tests for treponemal disease in pregnancy. *J Obstet Gynaecol Br Commonwealth* 1973;**80**:515-9.
4. Johnston NA. *Treponema pallidum* haemagglutination test for syphilis. Evaluation of a modified micro-method. *Br J Vener Dis* 1972;**48**:474-8.
5. Lesinski J, Krach J, Kadziewicz E. Specificity, sensitivity and diagnostic value of the TPHA test. *Br J Vener Dis* 1974;**50**:334-40.
6. Jephcott AE, Beveridge MAM, Sequeira PJL. Early TPHA response in primary syphilis. *Br J Vener Dis* 1977;**53**:147.
7. Luger A, Spendlingwimmer I. Appraisal of the *Treponema pallidum* haemagglutination test. *Br J Vener Dis* 1973;**49**:181-2.
8. Okamoto S, Tanabe Y. Studies on *Treponema pallidum* haemagglutinating antibodies. 1 TPHA antibodies in experimental syphilitic rabbits. *Br J Vener Dis* 1971;**47**: 77-80.

TO THE EDITOR, *British Journal of Venereal Diseases*

Attempted BCG immunotherapy for condylomata acuminata

Sir,

There is mounting evidence that cellular-mediated immunity (CMI) plays an important role in the resolution of human wart disease, although the exact mechanisms by which this occurs are not yet fully understood.[1-3] Various immunological treatments have been employed in the therapy of warts, including autogenous vaccine[4-6] and topical dinitrochlorobenzene,[7-9] with good results reported in most series of patients. Proponents of these measures believe that such therapy provokes a host immune response in patients with wart disease resulting in the immunological rejection of wart tissue. Following this line of reasoning, we proposed treating a group of patients with highly-resistant condylomata acuminata by BCG immunotherapy.

Six patients (five male and one female) were studied with biopsy-proven condylomata acuminata, whose mean duration was 8·4 years (range 2-35 years). In all patients previous forms of conventional therapy, which included repeated applications of topical podophyllin 25% in tincture of benzoin, had failed.

Patients were begun on a weekly series of vaccinations using University of Illinois BCG-Tice vaccine. An approximate concentration of 5×10^8 organisms per treatment were administered by the tine plate or scarification method or both. The mean number of treatments per patient was nine.

The sites chosen for vaccination varied somewhat from patient to patient but generally included the lower pubic and inner thigh areas adjacent to large clusters of lesions. Attempts were made to inject BCG intralesionally with a syringe but the villous nature of the lesions made this technically difficult. We were able to inject BCG successfully into the base of several lesions of two patients on three different occasions each, but both patients complained of such intense local pain that we were forced to abandon this approach in favour of the techniques described above.

Patients were followed closely for any change in the appearance of their lesions. While four out of five patients became sensitised to BCG, with development of pustules and local erythema at the tine and scarification sites, no significant changes (either quantitative or qualitative) were observed in their adjacent condylomata lesions. It was further observed that the injection of BCG at the base of the lesions in two patients highly sensitised to BCG on areas of normal skin completely failed to provoke an inflammatory response.

The lack of an equivalent inflammatory response to BCG injected into the immediate vicinity of the condylomata in BCG-sensitised patients at first seemed difficult to explain. A further search of the literature showed that a similar phenomenon was recently reported by Freed and Eyres, whose patient with recalcitrant hand warts responded positively to PPD injected into normal skin yet PPD injected intralesionally produced no inflammatory response.[10] It was subsequently shown by in-vitro methods that this patient's wart tissue contained a potent "blocking factor" capable of supressing a normal CMI response.

The presence of "blocking factor" could explain the observations of this study. Further characterisation of this substance, particularly its origin and mechanism of interaction with the immune system, may perhaps shed new light on our understanding of human tumour immunology.

Yours faithfully,

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References

1. Morrison WL. In-vitro assay of cell-mediated immunity to human wart antigen. *Br J Dermatol* 1974;**90**:531.
2. Viac J, Thivolet J, Chadonnet Y. Specific immunity in patients suffering from recurrent warts before and after repetitive intradermal tests with human papilloma virus. *Br J Dermatol* 1977;**97**:365.
3. Lee AKY, Eisinger M. Cell-mediated immunity to human wart virus and wart-associated tissue antigens. *Clin Exp Immunol* 1976;**26**:419.
4. Abcarian H, Sharon N. The effectiveness of immunotherapy in the treatment of anal condyloma acuminata. *J Surg Res* 1977;**22**:231.
5. Powell LC, Pollard M, Jinkins JL. Treatment of condyloma acuminata by autogenous vaccine. *S Med J* 1970;**63**:202.

(continued on p 150)

Book reviews

Handbook on Contact Tracing in Sexually Transmitted Diseases. By Isobel Hunter, John Jacobs, Hilary Kinnell, and Ann Satin, 1980. The Health Education Council, London. Pp 168. Price £5.00.

The importance of contact tracing in the control of sexually transmitted disease has been recognised for many years. The principle of including workers with special responsibilities for contact tracing in the staff of clinics has only developed over the last 20 years in Britain. These workers have come from a wide variety of backgrounds. They learned their work initially by trial and error, and recently new entrants have been taught by experienced workers during brief attachments. For several years there have been efforts to provide more formal training and this handbook is one product of these efforts. Although published by the Health Education Council, much of the stimulus has come from the Department of Health and Social Security, especially from the advisers to the Chief Medical Officer, Dr C S Nicol and Dr R D Catterall.

The book is remarkably comprehensive and succeeds admirably in the difficult dual role of providing information in a readable form for the newcomer and of acting as a reference book for the experienced worker. There is a clear, concise account of the more important infections and the implications for contact tracing. There is a good description of a clinic and how the patient proceeds through it from reception onwards.

The record-card system for contacts is explained in one section of the book. This system was devised early in the research programme that led to the writing of this handbook. As the book states, several reliable systems exist but this one serves particularly well for keeping track of patients and contacts and for analysing results.

The section on actual interviewing is perhaps a little forbidding for the newcomer and the wording used for the five objectives of the contact-tracing interview could be simplified with advantage in subsequent editions.

In the section on "Action to secure the attendance of contacts" more emphasis could be given to the importance of contacts attending either with a contact slip, and producing it on arrival rather than at some later stage, or knowing the vital details on it. In view of the number of hours and telephone calls that are wasted daily if the contact forgets this information, perhaps the importance of this cannot be overemphasised. Another important point worth mentioning is that time and energy will be saved if the patient's clinic is informed as soon as a contact attends another clinic. The variety of useful tips on visiting a contact reflect the experience of the team of authors.

The book also provides useful appendices, such as lists for further reading, useful organisations, and the latest list of STD clinics in Britain.

The handbook must obviously be available in all sexually transmitted disease and genitourinary medicine clinics in Britain for contact tracers. It should also be read by all the other staff for background information and so they may help the contact tracers in their work. While the handbook is intended primarily for use in this country, it will be of value to all those who treat patients with sexually transmitted disease and who understand English.

R N Thin

Notice

IUVDT Conference—New Zealand, 1981

The South-east Asian and Western Pacific Region of the International Union against the Venereal Diseases and Treponematoses are holding a second regional meeting at Christchurch Clinical School, Christchurch Hospital, Christchurch, New Zealand, from 23 October to 26 October 1981.

The proposed themes, with special emphasis on regional problems, will include: the changing pattern of drug resistance of the gonococcus (with special reference to β-lactamase-producers) and its effect on treatment and control; the rising tide of viral STDs; recent problems with the control of syphilis; the arguments for and against a laboratory service for the diagnosis of chlamydia; and obstetric venereology.

Among the overseas speakers will be Dr R D Catterall of London (president of the IUVDT) and notable speakers from the USA and Singapore. Anyone wishing to attend or present a paper or both should address inquiries to: IUVDT Conference, Postgraduate Office, Medical Centre, Christchurch Hospital, Christchurch, New Zealand.

References—*continued from p 148.*

6. Ablin RJ, Curtis WW. Condyloma acuminata; treatment by autogenous vaccine. *Ill Med J* 1975;**147**:343.
7. Greenberg JH, Smith TL, Katz RM. Verrucae vulgaris rejection; a preliminary study of contact dermatitis and cellular immunity response. *Arch Dermatol* 1973; **107**:580.
8. Pipkin JL. Immunotherapy for difficult wart cases. *Hosp Physician* 1974;**10**:29.
9. Moore GE, Norton LW, Meiselbaugh DM. Condyloma; a new epidemic. *Arch Surg* 1978;**113**:630.
10. Freed DLJ, Eyres KE. Persistent warts protected from immune attack by a blocking factor. *Br J Dermatol* 1979;**100**:731.